

## Requesting State Office Assistance for Potential Archeological Impacts

The following steps detail how to complete a cultural resource request once a site is determined to be in a section identified as having cultural resources.

#### Overview

This document details the review process of potential archeological impact sites. Requests will be made to the state office digitally and the completion of the Performance Results System (PRS) will be done by the field office (Section C).

Any information provided to a field office showing specific cultural resource locations is extremely sensitive and is only to be used by NRCS Field Office personnel in order to assess areas where there is a potential for disturbing known cultural resource sites. Location of cultural resources are categorized as "no release" under 120 General Manual, Part 408, Subpart C, Amendment 66, dated December 1, 2004.

This document details the process using either ArcGIS 8.3/9.0 (Section A) or using ArcView 3.3 (Section B). The **Arch\_Determinations\_###.mxd** file will be opened to complete a requested determination when using ArcMap 8.3. This file has been created and placed on the field office server by the State Office staff. If using ArcView 3.3, the request will be completed using the file, **arch\_requests.apr**. This file is created by the field office. Both project files are stored in the field office's f:\geodata\project\_data\nrcs\archeology directory.

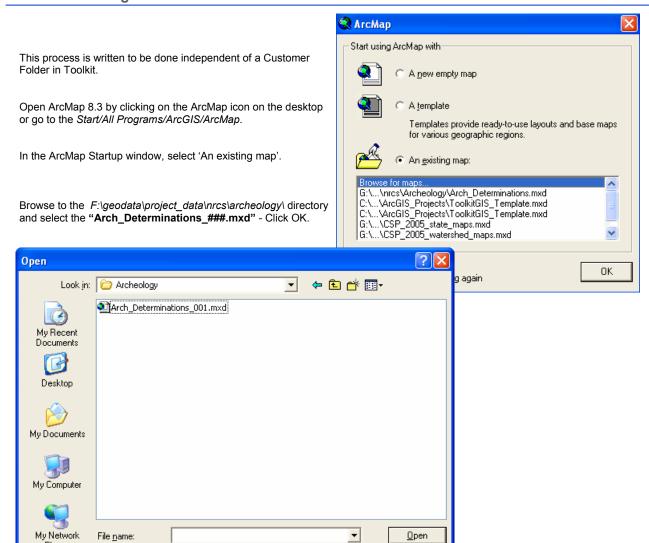
Each county uses its own shapefile named "countyname\_cult\_res\_request.shp". This shapefile (for most counties) was created and placed on your server by the State Office GIS Staff. It contains one example record of data. New data is to be entered by the field office staff as requests are digitized and required data is added. Each time a new request is made, this is the file that is edited, whether using ArcGIS 8.3 or ArcView 3.3. One record is automatically added to the data table for each area that is digitized. The appropriate data is then added to the corresponding line in the table.

Before beginning in ArcGIS 8.3/9.0 or ArcView 3.3 verify if a cultural resource request is necessary by looking on the state web page http://www.uiowa.edu/~osa/gisatosa/. If the area is in need of review continue with this process.

Make your requests early in the planning process. We expect that once a request has been submitted by the field office and contact has been made with the State Office Archeologist (Richard Rogers), the assessment will be completed within 5 working days. In the case of an emergency discovery, telephone the State Office Archeologist immediately.

After the determination is completed, an e-mail notification will be sent. The State Office Archeologist may contact the field office by phone with assessment results. For any archeological sites that are impacted by planned activity, a map will be provided as well. These maps will be placed on the field office server in the <code>f:\geodata\project\_data\nrcs\archeology\</code> directory as .pdf files or .jpg files. Acrobat Reader can be used to view .pdf type maps while any other image viewer can be used to view and print .jpg files. As noted above, these maps should only be viewed by NRCS personnel and be placed and kept within the case files of owners/operators for determinations that were completed. Maps will only be provided for sites directly impacted by a planned activity or within the vicinity which could impact a known site. These will be provided at the discretion of the NRCS Archeologist.

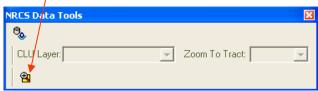
# Section A — ArcGIS 8.3 Locating Area Of Interest



If the NRCS Data Tools has not been installed on your computer, navigate to your *F:\* drive and follow the instructions in the file, NRCS\_Data\_Tools\_Install\_and\_User\_Guide.pdf. Once it has been installed, navigate to the **Tools - Extensions** menu and check the "NRCS Data Tools" item. This will open the [NRCS Data Tools] toolbar (below). On the toolbar, Click on the 'Zoom to Section' button.

•

Cancel

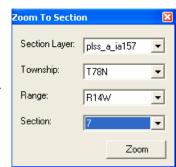


Files of type:

The [Zoom To Section] window will open. Use the drop down lists to choose the Section Layer that you wish to Zoom in on; enter Township, Range and Section of the area of interest.

ArcMap Document (\*.mxd)

Click on the 'Zoom' button and the map display area will zoom in on the specified section.





In the [Select a Layer to Edit] window choose the *county-name\_cult\_res\_request* layer as your editing layer.



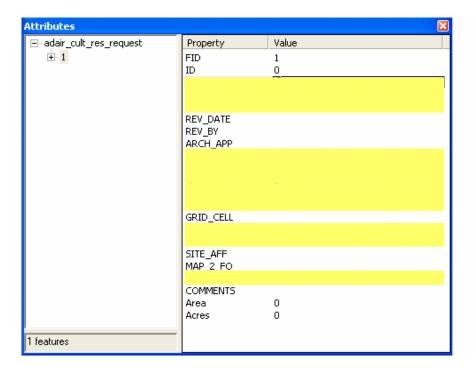


Select the "draw polygon" tool; draw a polygon of the area being requested for review of possible archeological impacts. To start drawing with the tool single click at a corner of the area to be drawn, click once on each point where the boundary changes and double click on the last point in polygon. The new polygon will appear as the one in the example below. Be sure that the field is selected (outlined in selection color –usually light blue) after you have completed digitizing. If it is not selected, use your selection tool and click on the polygon to select it.



Click on the 'Attributes' button and a window will open that allows you to add the information to the table that that will be needed by the State Archeologist.





Data in Red to be entered by Field Office when completing request. \*\*Completed by State Office

**County Name Date Requested** Person Requesting Determination

\*\* Date reviewed in State Office

- \*\* State Office Reviewer
- \*\* State Archeologist reviewed Section No. (##)

Township No. (###) Range No. (##)

East or West (W or E)

Legal Description (1/4 of 1/4)

Not Required

Land owner Name Planned Practice Name

- \*\*Site Affected (Yes or No)
- \*\* Date map sent to Field Office Field Office Phone Number

May be entered by Field or SO Not Required Not Required

The items highlighted above in yellow need to be edited by the Field Office. To Edit the data in a specific field in the table. Click on the area to the right of the field name under the heading 'Value'. A box should appear with a curser in it, type the data in. This can be done for each field that needs data entered. When all necessary data has been entered, Close the Attributes window.

On the [Polygon Editor] Toolbar in the drop down menu under 'Editor' save the edits and stop editing.

Be sure to save and close the project or .mxd.

Proceed to Section C of this document for instructions on submitting the area for review.

## Polygon Editor $\blacksquare$ Editor 💌 О Stop Editing Save Edits Use Vertical Topology Snapping...

## Section B — ArcView 3.3 **Project File Setup**

If the project file "arch\_requests.apr" already exists on your f drive open it up and go to the section of this document titled 'Locating Area of Impact'. If not, then follow these steps:

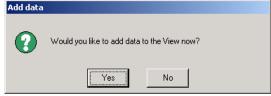
Be sure Outlook is closed (otherwise ArcView will try to link to Toolkit).

Start, ArcView GIS 3.3.

Select "Create a new project – with a new View", and click OK.

Select "Yes" when asked "Would you like to add data to the View now?"

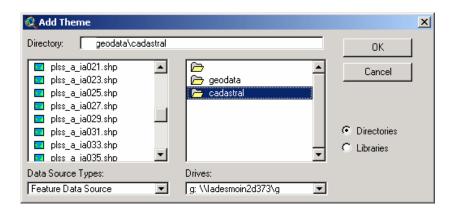




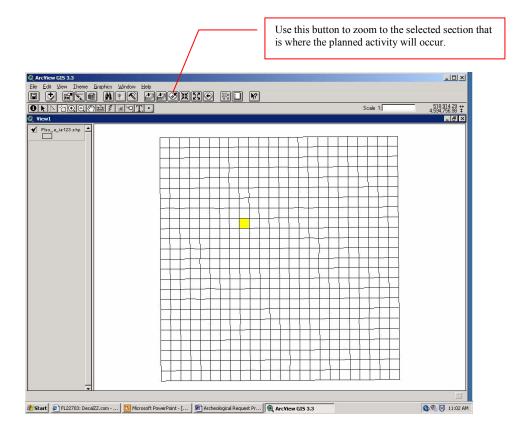
#### **Locating Area of Impact**

Note: It is not necessary to load data layers into the arch\_requests.apr if the data was saved from a previous determination. Use the plss\_a\_ia###.shp layer (### refers to the 3 digit county number that is a part of the FIPs code) and the process shown below to locate the section of interest and go on to the section of this document titled 'Digitizing the Area of Impact".

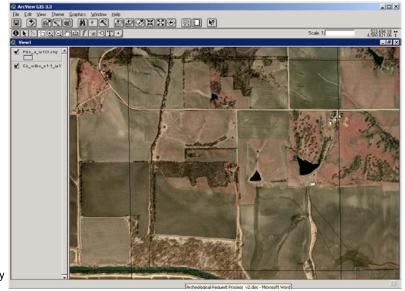
Browse to the F:\geodata\cadastral directory and select the section line theme for your county (plss a ia###.shp) - Click OK.



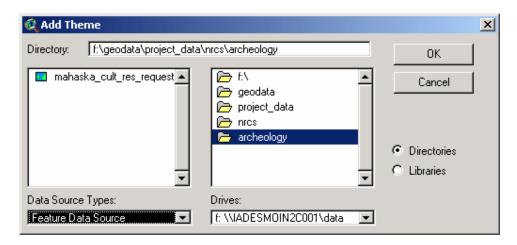
Locate the section where the proposed activity will take place using the 'Identify' tool or the 'Query Builder' button to locate the section of interest. If the section of interest is not highlighted in yellow then use the 'Select Features' tool to do so. When the section of interested is highlighted use the 'Zoom To Selected' button to zoom in.



Add the ortho imagery to the view using the "Add theme" button.



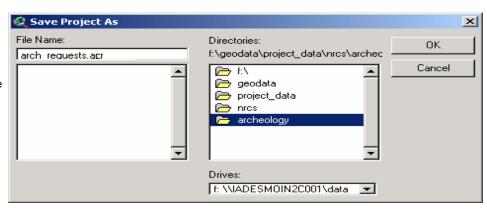
Add the theme "countyname\_cult\_res\_request.shp" from the f:\geodata\project\_data\nrcs\archeology\ directory



"View 1" should now contain 3 themes: plss\_a\_ia###.shp, "countyname\_cult\_res\_request.shp, and the county 2002 CIR ortho imagery theme. Be sure the ortho is placed at the bottom of the list in the table of contents on the left side of the "View 1" window. If it is not Click on the name of the CIR and hold down while you drag it to the bottom of the list in the table of contents.

Save the ArcView Project as "arch\_requests.apr under the \geodata\project\_data\nrcs\archeology\ directory

Once the project file is created and saved with the three themes listed above you are ready to begin digitizing and attributing a new request area.

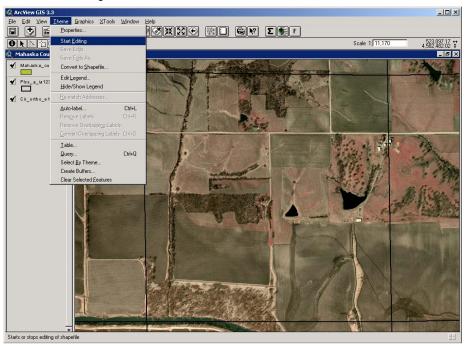


## **Digitizing the Area of Impact**

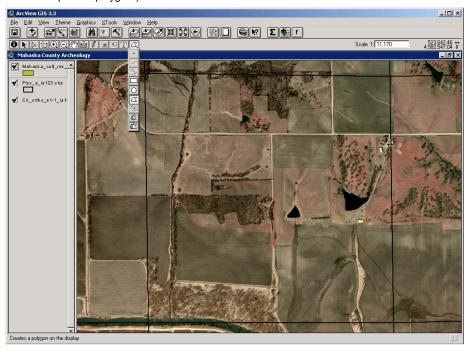
Open the arch\_requests.apr file if it is not already open.

To digitize the area of proposed activity:

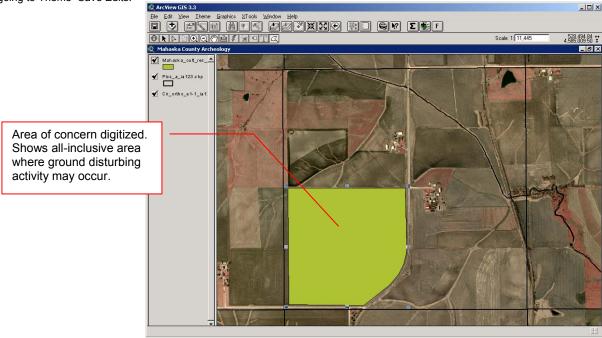
Click on the name of the *countyname\_cult\_*res theme so the theme is raised in the table of contents (left side of window); to start editing go to Theme>Start Editing.



Select "draw polygon" tool; draw a polygon of the area being requested for review of possible archeological impacts. (To start drawing with the tool single click at a corner of the area to be drawn, click once on each point where the boundary changes and double click on the last point in polygon.)



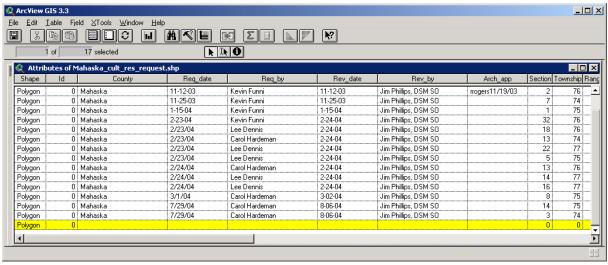
The new archeology request is identified by the area that has been digitized in this project. Be sure to save your new edits, do this by going to Theme>Save Edits.



#### **Editing the Table**

Select "Open Theme Table" button (box will open w/ new record highlighted in yellow, if the highlighted record is not visible use the scroll bar at the right side of the table to scroll up and down the list until the record is visible);

The data table below is an example from the Mahaska County Field Office. Individual county tables will contain all of the requests from that county.



Enter data in the following boxes for the record highlighted in yellow (newly digitized area), to enter data use the 'Edit Attributes' tool and click in each cell to enter data:

County, Req\_date, Req\_by, Section, Township, Range, Rgn\_e\_w (east or west), Legal\_d (1/4 section), Grid\_cell (optional; if known), Landowner, Activity (terrace, waterway, etc.)

The NRCS State Archeologist will update the other blank fields in the attribute table during the review process.

Close the attributes table. Save the edits by going to Theme>Save Edits.

Stop editing by going to Theme>Stop Editing. Then Save and Close the project.

#### Section C

#### **Submitting for Review**

E-mail Richard Rogers (Richard.Rogers@ia.usda.gov) and Jim Phillips (jim.phillips@ia.usda.gov) to inform them when there is a new archeological request. <a href="Include your name">Include your name</a>, NRCS office location, county and the name of the landowner and the legal description of the proposed work that is planned. Be sure that the updated shapefile (countyname\_arch\_request.shp) is saved in the f:\geodata\project\_data\nrcs\archeology directory. A copy of this file will be made at the time the request is received by the State Office. This file will be copied and saved on the State Office geodata server. These copies will serve as the State Office record of all archeological requests made.

The reviewer will update appropriate fields in the attribute table. The SITE\_AFF field will be marked "Yes" if the area of concern appears to have the potential to impact a known cultural resource site. The reviewer will also populate the REV\_BY and REV\_DATE fields (See Section A, page 3). This updated file will be placed on the field office server. This will serve as verification that the request has been acted upon and a determination completed. To verify an assessment has been completed, look at the attribute file for your county's shapefile to see if the table has been updated. Viewing the table will also allow you to see comments added into the COMMENTS field by the State Office reviewer.

### **Completed Review & PRS Data Entry**

Richard or Jim will reply to the original request via e-mail when assessment is completed. All requests not impacting a known cultural resource will be sent a reply by e-mail. All replies will be sent to the District Conservationist and the person making the original request.

In the event that a known cultural resource appears to be impacted, a map will be provided detailing the known sites and the proximity to the planned activity. The field office will also be contacted by phone in addition to the e-mail response when a site appears to be impacting a known site. The map will be placed in the county f:\geodata\project\_data\nrcs\archeology folder. The map can be viewed by double-clicking the .pdf file or .jpg file in windows explorer. The .pdf file will open Adobe Acrobat with an orthophoto showing the project area the field office requested in relation to areas of known archeological sites. Print this on the color printer and file.

Cultural Resources are categorized as "no release" under 120 General Manual, Part 408, Subpart C, Amendment 66, dated December 1, 2004. Proceed with process as required by NRCS policy based upon information State Office has provided.

Once the review is completed and returned to the field office, it is now the field office responsibility to complete the Performance Results System (PRS) data entry. Previously this was done in the State Office and this process has now changed.

This document was developed by the USDA-NRCS, Des Moines, Iowa.

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